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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,728	06/11/2007	Brian Mandt	00758.1824USWO	1718

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EXAMINER	
STELLING, LUCAS A	

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
01/05/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/591,728	MANDT ET AL.	
	Examiner	Art Unit	
	Lucas Stelling	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 September 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 9-1-09 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 7,160,451 and 7,238,285 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rohrbach in view of U.S. Patent No. 4,075,098 to Paul et al. ("Paul").

6. As to claim 1, Rohrbach teaches a service cartridge for positioning in a filter housing; the service cartridge comprising:

filter media **(315)** having a first and second ends **(A and B)** and positioned around a central opening area;

a first end cap **(part of the frame 317 constitutes an end cap of the filter)** secured to the first end of the filter media; and ,

a treatment agent storage and release cartridge **(the cartridge is defined by the upper plate 320, the lower plate 322, the sealing member 319, see also [0055], [0056], and [0057]) to** the second end of the media;

the treatment agent storage and release cartridge having a ring configuration **(the filter is cylindrical)** defining an inside wall **(E)** defining a central flow conduit in liquid flow communication with the central open area defined by the filter media;

the inside wall having no diffusion apertures **(no diffusion apertures are show through the inside wall)** therethrough; and

a housing seal arrangement **(see C and D)**.

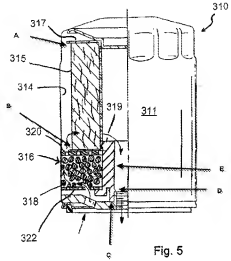

Fig. 5

7. Rohrbach is different from claim 1 in that in that in Rohrbach the outer housing of the filtration unit is an exterior wall to the additive section, without which the plurality of additive dispensing modules would not be held in the cartridge. Conversely, claim 1 requires no impermeable wall there around the filter media in extension completely between the first and second walls when the cartridge is ready for installation in a filter housing, for use.

8. Paul teaches a ring shaped additive body located in a filter housing **(See Paul 84 in Fig. 1)**. Paul teaches that the use of an additive body comprising high-molecular weight polymer additives allows for a slow dissolution and dispersion rate in the oil **(See Paul col. 8 lines 5-25)**. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to replace the plural additive dispensing modules in Rohrbach with an additive ring type configuration as shown in Paul in order to obtain a slow dissolution and dispersion rate of additives within the oil. In doing so,

the ring shaped body in Paul will be held within the structure of Rohrbach even when the outer housing is not attached, as the additive in Paul is solid up to temperatures of oil contact, thereby providing internal structure to the device which does not require the filter housing for containment. **(See Paul col. 8 lines 15-25)**.

9. As to claim 2, Rohrbach and Paul teach the device of claim 1, and Rohrbach shows a service cartridge where the cartridge inside wall seals to the housing in a radial configuration **(See C and D above)**.

10. As to claim 3, Rohrbach shows a cartridge with diffusion apertures arrangements are on an upstream side of the seal **(See 322).**

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rohrbach and Paul and in further view of U.S. Patent No. 6,322,697 to Hacker et al. ("Hacker").

12. As to claim 4, Rohrbach and Paul teach the device of claim 1, and Paul teaches that the solid additive ring has an extending peripheral lip, a top and an inner wall, which forms a cup for holding the additive **(Paul See Figs 8-10, the cup is formed from the inner wall, top, and extending lip of the additive cap. Especially see 200 in Fig. 8, 200a in Fig 9, and 202 in Fig. 10, Paul contemplates varying the size of the extending lip as well as placing openings on it)**. Paul teaches that varying the length of the lip controls the dissolution rate of the additive **(See Paul col. 12 lines 45-65)**. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to provide a cup with a lip in order to control the dissolution rate of

the additive within the filter. Also, in the configuration of the additive in Paul the end cap of the filter forms a cover section for the additive **(See in Figs 1 and 8)**.

13. However, Rorhbach in view of Paul does not mention whether the filter is attached to the cover with adhesive. Hacker teaches an oil filter with end caps in which the filter element is sealed and secured with adhesive to the end caps **(See Hacker col. 3 lines 50-65)**. A person having ordinary skill in the art would recognize that sealing and securing the filter in Rohrbach and Paul to the cover of the cup will prevent movement of the filter within the housing and would also prevent oil from passing between the filter and the cover. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to secure the filter media to a cover/end-cap section with adhesive in the filter of Rohrbach and Paul in order to secure the filter element and to prevent oil from passing between the media and the end cap of the filter.

14. Claims 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohrbach as modified by Paul and Hacker as applied to claim 4 above, and further in view of U.S. Patent No. 6,488,845 to Neufeld et al. ("Neufeld").

15. As to claim 5, Rohbach as modified by Paul and Hacker teaches the filter cartridge of claim 4, but does not teach the use of a mounting prong arrangement. The use of mounting prongs are shown, for example, in Neufeld **(See Figs. 2 and 5, 54 is a finger for engagement with flared surface on the engagement plug 60)**. Nuefeld teaches that the mounting prongs facilitate securing the filter to the housing **(See**

Neufeld col. 4 lines 27-50). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to provide a mounting prong arrangement projecting axially from the end cap in order to engage with a feature on the housing, thereby securing the filter element.

16. As to claim 6, Rohrbach as modified by Paul, Hacker, and Neufeld teach the filter cartridge of claim 5, and Rohrhbach depicts using a pleated media **(See [0055])**.

17. As to claim 7, Rohrbach as modified by Paul, Hacker,and Neufeld teach the filter cartridge of claim 6, and Rohrbach teaches that support screens are optional **(Rohrbach [0055])**, and it would be obvious to omit a screen for support if the filter were self supporting. See MPEP 21144.04(II)(A), *omission of an element and its function is obvious if the function of the element is not desired/needed.* Therefore, it would have been obvious to a person of ordinary skill in the art to omit the cylindrical support screen.

18. As to claims 8-10, Rohrbach as modified by Paul, Hacker, and Neufeld teach the filter cartridge of claim 7, and the axial lengh ratio is a result effective variable which controls the amount of treatment agent which will be carried by the filter, and the amount of treatment agent which may be exposed to the oil, thereby affecting the life of the additive and/or also the rate of delivery. *Discovery of the optimum value of result effective variable in known process is ordinarily within the skill in the art and would have been obvious, consult In re Boesch and Slaney (205 USPQ 215 (CCPA 1980)).* Furthermore changes in size and proportion have been held obvious absent an unobvious change in operation of the device. See MPEP 21144.04(IV)(A).

19. As to claim 11, Rohrbach as modified by Paul, Hacker, and Neufeld teaches the device of claim 10, and the first end cap covers the end of the filter and does not allow liquid to enter the media from the end side, nor does it allow liquid to bypass the filter and pass downstream. The first end cap therefore is closed **(See Rohrbach Fig. 5)**.

Response to Arguments

20. Applicant's arguments filed 9-1-09 have been fully considered but they are not persuasive.

21. Applicant argues with respect to amended claim 1 that Rohrbach alone does not meet the limitations because Rohrbach requires the filter housing in order to contain the filter additive material in place, whereas amended claim 1 requires that the filter media have no impermeable wall there around in extension completely between the first and second ends of the filter media when the cartridge is ready for installation in a filter housing. More specifically applicant argues that without a housing the additive material in Rohrbach would spill. See Remarks page 5. In response, this argument is moot in view of the new grounds of rejection presented above. It would have been obvious to a person having ordinary skill in the art at the time of invention, having before him Rohrbach and Paul, to use a non-particulate media, such as the solid polymer additive in Paul, and in doing so to provide a device which does not require the filter housing for containment.

22. Applicant also appears to argue with respect to claim 1 that the claimed filter cartridge is removable and that it can be changed out, but that the cited references contemplate spin-on filters. In response, the pending claims are directed to an

apparatus. "Apparatus claims cover what a device *is*, not what it *does*." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). See MPEP 2114. The inner structure of the filter, which applicant claims as a service cartridge, is obvious in view of the prior art as discussed and combined above for the rejection of the claims. The fact that applicant intends to make the structure removable by using the inner structure with an openable filter cartridge housing relates to applicants intended use of the device and does not serve further define the invention in terms of its structure. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

23. Applicant's arguments with respect to claim 12 are moot as claim 12 is canceled.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Stelling whose telephone number is (571)270-3725. The examiner can normally be reached on Monday through Thursday 12:00PM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

las 12-30-09

/Matthew O Savage/
Primary Examiner, Art Unit 1797